

World Trade in Typewriters 1948-1958

U. S. DEPARTMENT OF COMMERCE

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FOREWORD

The pattern of world trade in typewriters is quite different today than it was 10 years ago. The market is now truly global in extent. The number of companies producing typewriters has increased, and typewriter companies are international in structure and character.

This study traces global developments in the typewriter industry during the period 1948-1958. It was prepared by Charles F. Daoust and Angelina P. McEntee, under the direction of James L. Oliver, Director, Business Equipment and Services Industries Division, Business and Defense Services Administration.

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WORLD TRADE IN TYPEWRITERS

1948-1958

Because it is primarily a tool of commerce, the typewriter and the technology of its manufacture have remained, until recently, of special interest only to the highly developed industrial countries of Western Europe and North America. However, because the typewriter is an important international commodity, the typewriter industry has been strongly affected by world-wide economic and political events of the past two decades -- notably World War II and the Korean War and the rise of nationalism in many areas of the world.

TRENDS DURING 1948 - 1958

Significant changes have occurred in the pattern of world trade in typewriters in recent years. Several European countries that had never before produced typewriters in large quantities have become important producers and exporters. Also, limited typewriter assembly and production operations have been established in Latin America and in Asia. This recent proliferation of typewriter production facilities on a world scale is in distinct contrast to the concentrated nature of the industry only a few years ago.

Traditionally, most of the typewriter trade had been between Europe and North America and a few commercially developed countries in other parts of the world. Production had been concentrated in the United States and Europe.

The United States clearly dominated world typewriter trade before World War II, supplying from one-half to two-thirds of the world demand through exports. Exports from the U. S. in 1958 supplied less than one-tenth of the World demand.

The war brought the loss of world markets and a drop in U. S. typewriter exports to a fraction of the prewar volume. For a brief period in the late 1940's, the United States regained her lost markets and exports rose to pre-war levels.

The Korean War, however, again brought a marked decline in U. S. typewriter exports -- at a time when competing production centers in Europe had been rebuilt and European firms were actively seeking export markets. Thus, the Korean War created an opportunity for European typewriter producers to become established in new markets throughout the world.

After the Korean War, U. S. typewriter firms were faced with: increased competition in their traditional markets; a thriving European typewriter industry that enjoyed a competitive advantage in lower production costs; a larger and growing world demand for typewriters; and established trade patterns, trade controls and regulations, and economic organizations. As a result, widespread changes were required in the structure and marketing strategy of the U. S. industry.

To share in the growing world market and to meet the challenge of European competition, U. S. typewriter firms moved overseas. Emphasis was shifted from exporting to overseas production.

GROWTH OF THE EUROPEAN INDUSTRY

The year 1948 was a pivotal one in world typewriter trade. By that year, European industry was beginning to recover from the effects of World War II. General economic conditions had improved and trade has increased. The typewriter industry shared in this industrial and economic resurgence, both from the standpoint of increased demand for its products and a favorable production climate.

Contributing to the general European economic growth was the formal establishment in 1948 of the Organization for European Economic Cooperation (O.E.E.C.). The O.E.E.C. is comprised of 18 countries: Austria, Belgium, Denmark, France, Germany (West), Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Sweden, Switzerland, Trieste, Turkey, and the United Kingdom. They all subscribe to the provisions of the General Agreement

on Tariffs and Trade (GATT) and one-third of them are members of the European Coal and Steel Community and the European Economic Community.

The countries that have registered the greatest gains in world typewriter trade during the decade 1948-1958 are important members of the O.E.E.C.: Germany (West), Italy, the Netherlands, the United Kingdom, Switzerland, Sweden, France, and Belgium.

These eight countries, together with Canada and the United States, account for practically all the world production and exports of typewriters. In 1948, the eight countries, combined, supplied about 33 percent of the estimated world total exports of typewriters. Their combined share of the world market has steadily increased. In 1957, they accounted for about 85 percent of the estimated world export trade in typewriters.

THE U.S. DECLINE IN EXPORTS

Since 1948, the U.S. share of the world export trade in typewriters has declined steadily. In 1948, U.S.-made typewriters accounted for an estimated 63 percent of the total world trade. In 1957, the U.S. share declined to about 9 percent of the world total. Preliminary estimates for 1958 indicate a further decline in the U.S. share, to perhaps 7 to 8 percent of the world total export trade.^{1/}

The decline in exports of typewriters has not only been relative -- i.e., in terms of percentage of the world total -- but also in terms of actual numbers of machines. The U.S. exported 278,118 typewriters in 1948; 106,169 in 1957;^{2/} and only 56,063 in 1958. With the exception of the years 1950 and 1951, when exports increased abruptly, the decline has been steady. The reversal of the

^{1/} Typewriters in International Trade, U.S. Typewriter Export Association, Washington, D. C.

^{2/} Figures compiled by U.S. Typewriter Export Association. The Bureau of the Census FT 410 Report, however, records only 103,664 units exported in 1957. The difference in number may be caused by shipments of unassembled machines being listed as parts by the Census, but as machines by the manufacturers.

downward trend of exports occurred during the early stages of the Korean War, in 1950-51, when European countries built up their inventories of typewriters in anticipation of a diversion of the U.S. industry to defense production.

Measured in terms of dollar value, however, and including the value of exports of typewriter parts, the U.S. has maintained a dominant, though slightly declining, position in world typewriter trade. In 1948, U.S. exports of typewriters and parts amounted to about \$26.7 million, compared to \$22.1 million in 1957.

The year 1958 was a turning point for the U.S. in world typewriter trade. It marked the first year in history that the value of imports of typewriters and parts exceeded the value of exports of these commodities. U.S. exports totaled \$14.7 million, and imports totaled \$19.9 million. Parts accounted for about 43 percent of total value of U.S. exports in 1958, compared to 40 percent in 1957, and 9 percent in 1948. (See Fig. 1)

U.S. - O.E.E.C. TRADE

A natural assumption would be that the growth of competing production centers in the O.E.E.C. countries would virtually eliminate them as a market for U.S. exports of typewriters and parts. Such an assumption, however, is only partially correct. Although the number of typewriters exported to the O.E.E.C. countries has declined since 1948, the dollar value of U.S. exports of typewriters and parts has, in fact, increased through 1957.

Data for 1958, however, show a marked drop from 1957 levels in U.S. exports to O.E.E.C. countries of typewriters and parts: a decline in number of units of 45.9 percent, and a drop in dollar value of 33.6 percent. This marked decrease in demand for the industry's products was undoubtedly a reaction to recessionary trends which prevailed in the O.E.E.C. countries through most of 1958. In other words, the extreme decrease in 1958 was not exclusively due to sudden heightened competition from producers in the O.E.E.C. countries, but to the generally depressed state of O.E.E.C. economic conditions.

During the 10-year period 1948-1957, the U.S. enjoyed a net favorable balance of trade in typewriters and parts with the O.E.E.C. countries: exports over the 10-year period totaled about \$49.5 million, and imports during the same period totaled about \$42.9 million.

In 1948, the O.E.E.C. countries accounted for about 21 percent of the total number of U.S. exports of typewriters, and about 20 percent of the total dollar value of U.S. exports of typewriters and parts. Parts accounted for about 4 percent of the dollar value of exports to O.E.E.C. countries.

Table 1. - U.S. Exports of Typewriters and Parts, 1948-58
(Quantity in number of typewriters; value
(typewriters and parts) in \$1,000)

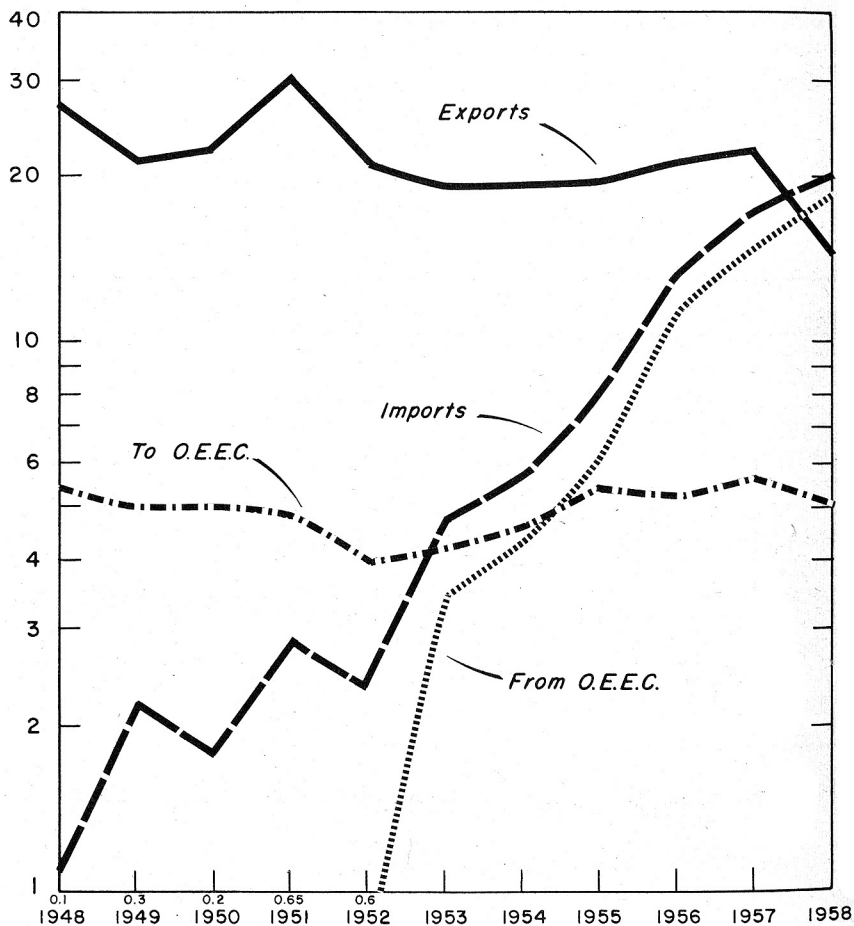
Year	Total		O.E.E.C. countries	
	Quantity	Value	Quantity	Value
1958..	56,063	\$ 14,715.5	8,735	\$ 5,056.9
1957..	103,664	22,151.4	12,841	5,618.5
1956..	116,940	21,000.7	13,586	5,230.4
1955..	119,823	19,269.6	21,121	5,403.9
1954..	129,923	19,144.5	19,300	4,618.7
1953..	151,796	19,067.4	24,402	4,197.4
1952..	197,590	21,290.7	30,249	4,058.6
1951..	313,004	30,112.4	51,712	4,898.4
1950..	243,390	22,103.6	53,967	5,066.6
1949..	224,241	21,351.2	53,794	4,982.7
1948..	278,118	26,775.4	59,308	5,421.7
Total	1,934,552	\$236,982.4	349,015	\$54,553.8

Source: U.S. Exports of Domestic and Foreign Merchandise,
Report No. FT 410, Pt. II, Bureau of the Census,
U.S. Department of Commerce.

Fig. 1

Value of U.S. Foreign Trade in Typewriters and Parts 1948-1958

VALUE IN
MILLION DOLLARS



In 1957, however, the O.E.E.C. countries accounted for only 12 percent of the total number of U.S. typewriters exported and about 25 percent of the total dollar value of exports of typewriters and parts. Parts accounted for about 43 percent of the value of exports to the O.E.E.C. countries. This ten-fold increase in the proportionate value of exports of parts to O.E.E.C. countries was the main factor in maintaining the U.S.'s favorable trade balance in the typewriter trade through 1957.

U.S. exports of typewriters and parts to the O.E.E.C. countries in 1958 totaled about \$5 million, and imports from the O.E.E.C. countries were \$17.4 million. This volume of imports during 1958 was more than enough to overcome the U.S. net favorable balance of trade of the previous 10 years, and to shift abruptly the balance in favor of the O.E.E.C. countries. Including 1958, the 11-year cumulative trade balance shows: O.E.E.C., \$60.4 million; U.S., \$54.5 million.

The composition of the U.S. - O.E.E.C. trade in typewriters and parts has changed radically since 1948. Typewriter parts now make up the bulk of the U.S. industry's exports, accounting for 61 percent of the dollar value in 1958. The continued rise in exports of typewriter parts is related to the establishment of U.S. typewriter plants overseas. In the initial stages of overseas production, not all of the necessary parts can be fabricated locally. Some of the more complex parts must be imported from the United States.

The decrease in the number of standard office and portable models accounts for the large drop in the total number of typewriters exported to O.E.E.C. countries in recent years. Standard office models were the major item in the export trade in 1948, accounting for 64 percent of the total. In 1958, however, they accounted for only 26 percent of the total. The trend in portable exports is similar. Portables made up 25 percent of the typewriter exports in 1948, but only 11 percent in 1958.

Electric model typewriters are now the main item in the completed machine exports to the O.E.E.C. countries, accounting for 40 percent of the total number in 1958. This compares to only 8 percent in 1952 -- the first year electric typewriter exports were recorded as a separate

Item. Exports to O.E.E.C. countries of automatic and specialized typewriters have also increased in recent years, accounting for 7 percent of the total in 1958 and 1 percent in 1952.

Table 2. - Number of U.S. Typewriters Exported To O.E.E.C. Countries, By Type, 1948-58

Year	Office		Portable		Electric		Automatic or specialized		Total ^{1/}
	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	
1958	2,287	26.1	984	11.2	3,511	40.1	608	6.9	8,735
1957	5,471	42.6	1,131	8.8	4,692	36.5	1,436	11.2	12,841
1956	6,536	48.1	1,897	13.9	3,588	26.4	1,131	8.3	13,586
1955	12,411	58.8	2,773	13.1	4,394	20.8	860	4.1	21,121
1954	11,578	60.0	4,165	21.6	2,617	13.6	561	3.0	19,300
1953	11,147	45.7	5,069	20.8	1,917	7.9	501	2.0	24,402
1952	15,646	51.7	7,509	24.8	2,470	8.2	354	1.2	30,249
1951	29,442	56.9	13,530	26.2	^{2/}	--	^{3/}	--	51,712
1950	24,866	46.1	21,673	40.2	^{2/}	--	^{3/}	--	53,967
1949	38,633	71.8	12,385	23.0	^{2/}	--	^{3/}	--	53,794
1948	37,972	64.0	15,150	25.5	^{2/}	--	^{3/}	--	59,308
Total	195,989		86,266		^{4/} 23,189		^{4/} 5,451		349,015

^{1/} Includes used and rebuilt machines.

^{2/} Exports of electrics not recorded prior to 1952.

^{3/} Due to classification change in 1952, data is not comparable.

^{4/} 1952-58.

Source: U.S. Exports of Domestic and Foreign Merchandise, Report No. FT 410, Pt. II. Bureau of the Census, U.S. Department of Commerce.

Several trends are apparently well established in the U.S. - O.E.E.C. typewriter trade: declining U.S. exports of standard and portable typewriters; increasing exports of parts; and increasing exports of electric and specialized models. In terms of dollar value, the increase in parts, electrics and specialized models has offset the decrease in standards and portable. The rapid growth of competing European industry and the establishment of U.S. typewriter

plants overseas caused the development of these divergent trends in the U.S. - O.E.E.C. typewriter trade.

THE ROLE OF U.S. FIRMS IN EUROPE

The establishment of U.S. typewriter plants in the O.E.E.C. countries has been a major factor in the decline of U.S. exports of typewriters, and also in the increase in U.S. exports of parts. It has also been a factor in the rise of several European countries to importance in the world typewriter industry.

Prior to 1948, U.S. model typewriters were not produced in significant quantities in the O.E.E.C. countries. By the end of 1958, however, each of the major U.S. typewriter firms had established or acquired production facilities in one or more of these countries.

Market considerations were the chief factors prompting the U.S. firms to shift from exporting to production overseas. The European economic organizations, as organized in 1948 and after, and their concomitant trade regulations and foreign exchange controls made an European location attractive as a base for serving an expanding world market. For example, a location in the United Kingdom permitted preferential access to the British Commonwealth markets as well as the O.E.E.C. A location on the Continent offered access to the growing O.E.E.C. markets and also entry into the "Common Market."

Thus, the prospect of entering a concentrated, regional market having a combined population of 250 million, and a combined Gross National Product almost equal to that of the U.S., coupled with the possibility of exporting from Europe to dollar shortage areas of the world with European currency credits, could not be ignored by American firms. Other factors, of course, entered into the decision to establish plants overseas, but the rapid growth of the European and world market for typewriters and parts was the prime motivation.

Another, though secondary, factor in this development was the growing competition from European producers for the U.S. domestic market in lower-priced typewriters. By building plants overseas, the U.S. typewriter firms

also strengthened their competitive position for the U.S. domestic market in the lower-priced field, particularly in portable typewriters.

Because of generally lower production costs in Europe, low-priced, foreign portables early in the post World War II years began to account for an increasing share of the growing U.S. market. Some U.S. firms moved to protect their domestic market by locating overseas, or by acquiring foreign production facilities and meeting foreign competition on a more equal production cost basis.

As a result, some foreign-made American portable models are sold in the U.S. in competition with imported foreign models. Not all the U.S. firms producing overseas, however, export typewriters to the United States. Some confine overseas production output solely for the European and World markets.

U.S. IMPORTS

The 10-year trend in imports of typewriters is the reverse of the export trend. While exports have declined, imports have increased phenomenally. In 1948, total U.S. imports of typewriters numbered 13,229, valued at about \$1 million. Canada supplied 10,513, and the O.E.E.C. countries supplied 2,706. The following year, in 1949, imports of typewriters nearly doubled, totaling 25,558 units and valued at about \$2 million. Canada supplied 16,730, and the O.E.E.C. supplied 8,809 -- more than three times the number of the previous year.

By 1958, U.S. imports of typewriters had risen to 390,814 units. Canada supplied 20,902, and the O.E.E.C. countries 345,420, valued at \$17.2 million. Most of the imports from Canada were U.S. models. Imports from the O.E.E.C. countries have included, in the past few years, U.S. models as well as foreign models.

Although typewriter imports are not regularly recorded as to the type of machine, foreign statistical sources indicate that at least 70 percent of U.S. typewriter imports are portables. It is also clear that perhaps as much as one-third of the U.S. imports of portables are U.S. models manufactured overseas or in Canada.

Table 3. - U.S. Imports of Typewriters and Parts, 1948-58
(Value in \$1,000)

Year	O.E.E.C.		Canada		Total 1/	
	Number	Value	Number	Value	Number	Value
1958	345,420	17,470.7	20,902	1,552.2	390,814	19,989.3
1957	291,403	14,734.6	35,053	2,151.1	337,682	17,221.3
1956	248,155	11,479.8	10,316	1,040.2	275,887	13,028.0
1955	134,431	7,086.7	7,999	818.3	144,001	7,948.0
1954	79,884	4,293.8	22,879	1,290.3	104,944	5,652.1
1953	51,790	3,456.4	21,224	1,212.9	76,676	4,727.4
1952	14,163	616.0	16,570	1,731.5	31,062	2,355.1
1951	15,775	646.6	20,563	2,200.9	36,342	2,848.2
1950	6,273	225.7	16,720	1,549.3	23,012	1,776.3
1949	8,809	311.5	16,730	1,776.8	25,558	2,089.7
1948	2,706	98.2	10,513	979.1	13,229	1,078.3
Total	1,198,809	60,420.0	199,469	16,302.6	1,459,207	78,713.7

- 1/ Imports of typewriters from countries other than Canada and O.E.E.C., 60,929 units during this period, came mostly from East Germany, Czechoslovakia, and Japan.
2/ Source: U.S. Imports of Merchandise For Consumption, Report No. FT 110, Bureau of the Census, U.S. Dept. of Commerce.

DOMESTIC PRODUCTION AND CONSUMPTION

In view of the increasing trend in imports of typewriters, the question naturally arises: What has happened to domestic production? Quite simply, it, too, has increased. Factory shipments in 1948 totaled 1,172,859 standard typewriters and about 4,000 specialized models. In 1957, factory shipments totaled 1,637,296 standards, and 7,993 specialized models. Shipments dropped, however, in 1958 to about the same level as 1955 shipments: 1,225,697 standards, and 7,634 specialized models. Domestic shipments of all types of typewriters have averaged about 1.33 million machines a year over the past 11 years.

In the field where imports have made their greatest gains -- portable typewriters -- domestic production has

also increased. In 1955, portables accounted for about 48 percent of domestic shipments of typewriters. This proportion increased to 54 percent in 1958. Also, in 1958, two new portable plants were under construction in the United States.

The capacity of the U.S. market to absorb increasing domestic production and imports is apparently still growing. Domestic sales have annually taken an increasing proportion of U.S. typewriter production. In 1951, the peak year of U.S. exports of typewriters, domestic sales accounted for about 79 percent of total factory shipments. In 1958, domestic sales accounted for 97.4 percent of total factory shipments.

The annual total U.S. consumption, including imports, has doubled since 1948. In that year, 907,970 typewriters were consumed. Peak consumption of 1,879,307 typewriters was reached in 1957. Consumption declined in 1958, however, to 1,568,064 machines.

The annual average consumption of typewriters has been about 1.28 million machines over the past 11 years. This high rate of consumption, together with the fact that domestic sales are almost equal to domestic production, indicates that with the possible exception of 1958, there has been no large build-up of inventory stocks of new typewriters in the U.S. Also, it is clear that imports of typewriters have not yet gained enough of the U.S. market to bring about a significant curtailment of domestic production, even when there is a general recessionary trend in economic conditions.

WORLD PATTERN OF THE INDUSTRY

In summary, then, though the O.E.E.C. countries have become dominant in international trade in typewriters and are making competitive gains in the U.S. domestic market, they still constitute a major market for U.S. typewriters and parts.

Though the United States as an exporting country has lost ground in international trade, U.S. typewriter firms, by virtue of their overseas production facilities, are still dominant in international trade.

Table 4. - U.S. Production, Exports, Imports, Domestic Sales and Consumption of Typewriters, 1948-58
(Number of typewriters)

Year	Factory shipments	Exports	Imports	Domestic sales	Consumption ^{1/}
1953	1,233,313	56,063	390,814	1,201,617	1,568,064
1957	1,645,289	103,664	337,682	1,502,805	1,879,307
1956	1,500,704	116,940	275,887	1,367,945	1,659,651
1955	1,258,466	119,823	144,001	1,135,393	1,282,644
1954	2/1,111,025	129,923	104,944	n.a.	1,086,046
1953	1,294,651	151,796	76,676	n.a.	1,219,531
1952	1,383,126	197,590	31,062	1,190,904	1,216,598
1951	1,532,894	313,004	36,342	1,207,697	1,256,322
1950	2/1,408,347	243,390	23,012	1,158,816	1,187,969
1949	2/1,073,681	224,241	25,558	865,886	874,998
1948	2/1,172,859	278,118	13,229	969,080	907,970
Total	14,614,355	1,934,552	1,459,207	10,600,143	14,139,100
Annual average ..	1,328,577	175,868	132,655	2/1,177,794	1,285,372

- ^{1/} Consumption is assumed equal to shipments minus exports, plus imports, and includes sales and inventory. Domestic sales are based on shipments and do not include imports.
- ^{2/} Totals for the years 1948, 1949, and 1950 do not include specialized typewriters shipped to avoid disclosing figures for individual companies. Fewer than 4,000 typewriters were shipped, however, in each year. Similar data for 1954 are not available.
- ^{3/} Represents 9-year annual average; no data for 1953 and 1954.
- n.a. - Not available.
- Source: Facts For Industry Series M35C. Bureau of the Census, U.S. Dept. of Commerce; U.S. Exports of Domestic and Foreign Merchandise Report No. FT 410, Pt. II, Bureau of the Census, U.S. Dept. of Commerce; and U.S. Imports of Merchandise for Consumption Report No. FT 110, Bureau of the Census, U.S. Dept. of Commerce.

The United States has become a major market for the O.E.E.C. countries production of typewriters. The growth of the U.S. market has been sufficient to consume both increasing imports and increasing domestic production of typewriters. The largest gains have been in portable typewriters, both in domestic production and imports.

West Germany

West Germany has been the leader in the postwar development of the European typewriter industry. Most of Germany's prewar production capacity in office equipment was located in East Germany. The few plants in West Germany were destroyed by the war. When the industry was re-established in West Germany after the war, new, efficient, plants were constructed. As early as 1949, West Germany became the leading producer of typewriters in Europe. West German typewriter production has since increased from 121,964 units in 1949 to 737,573 units in 1957.

West Germany has also become the undisputed leader in international trade in typewriters. In 1948, German exports of typewriters accounted for only one percent (4,442 units) of the estimated world total. By 1957, her share of the world market was nearly 30 percent (352,312 units). The United States has become the best foreign market for German typewriters, accounting for 35 percent (123,001 units) of her 1957 exports. The O.E.E.C. countries accounted for about 34 percent (119,908 units).

The U.S. typewriter industry is closely tied to the German industry. At least 12 typewriter manufacturing firms are represented in Germany. Three of the twelve are owned by U.S. typewriter firms. Another produces all the typewriters sold by a U.S. office equipment manufacturer.

Italy

Italy has made a determined bid for supremacy in the typewriter industry since 1948. At that time, Italy was the second largest producer of typewriters in Europe, having an annual production of 75,282 units. Although Italy steadily increased production to 334,465 units in

1957, she is still second to West Germany.

Italy has also gained a greater share of the world market. In 1948, her exports accounted for 11 percent (48,363 units) of the estimated world total. In 1957 her share was 16.8 percent (200,708 units). At least four typewriter manufacturing firms are operating in Italy. Two are owned by U.S. typewriter firms.

The United States and Mexico are important markets for Italian typewriters, accounting for 16 percent and 14 percent, respectively, of her total typewriter exports in 1957. Exports to other O.E.E.C. countries were 72,725 units, or about 36 percent of the total.

United Kingdom

The United Kingdom has also made substantial gains in the typewriter industry. The U. K. ranks third in European production, even though production increased from 61,800 units in 1948 to an estimated 287,000 units in 1957. Her exports claimed 6 percent (25,896 units) of the world total in 1948. In 1956, the United Kingdom's share had more than doubled to 14.4 percent (145,587 units). A slight decline occurred in 1957, however, when exports of 144,356 units accounted for only 12 percent of the world total. The U. K. ranks fourth in exports of typewriters.

The British Commonwealth countries in 1948 accounted for 76 percent (19,680 units) of the United Kingdom's typewriter exports. Since then the market has been broadened considerably, yet the Commonwealth nations still accounted for 69 percent (100,957 units) of total U. K. exports in 1956. Canada, Australia, India, New Zealand, and the United States are the principal foreign markets for United Kingdom typewriters. The O.E.E.C. countries accounted for only 14 percent (19,929 units) of total U. K. exports in 1956.

Nine manufacturers of typewriters are located in the United Kingdom. One firm is Italian owned. Four are owned by United States typewriter firms.

Netherlands

The Netherlands, the third largest exporter of typewriters in 1957, began to rise to importance in the typewriter industry in 1953. In 1949, its share of the world trade in typewriters was less than one-half of one percent. Production was confined, for the most part, to assembly operations for the local market. Large-scale production for export began late in 1953. The following year, the Netherlands' exports accounted for 7 percent (50,900 units) of the world total. By 1957, the Netherlands' share of the world market had doubled to 14 percent (167,700 units).

The United States and the United Kingdom are the largest markets for Netherlands-built typewriters, accounting for 52 percent and 15 percent, respectively, of her exports. The O.E.E.C. countries combined (including the United Kingdom) account for 26 percent of the Netherlands typewriter exports. Portables make up most of the exports to the United States, but standard office models are most important in the O.E.E.C. trade.

Two United States firms produce typewriters in the Netherlands. Their expansion has accounted for the rapid growth of the Netherlands typewriter industry.

Switzerland

Switzerland is the fifth ranking exporter of typewriters. She supplied about 11 percent of the world market in 1948 (46,600 units), but the Swiss share declined to about 9 percent (109,800 units) in 1957. The United States is the largest market for Swiss typewriters, accounting for about 27 percent of Swiss exports in 1957. The O.E.E.C. countries accounted for 38 percent, France receiving 10 percent and West Germany 8 percent.

Sweden

Sweden has long been an important producer of typewriters. Information is lacking on the number of units exported because they are recorded only by weight. The U.S. Typewriter Export Association, however, has prepared estimates of the number of units by using an average weight of 15 kilograms per unit. These estimates indicate that Sweden's exports accounted

for about 3.4 percent of the world total in 1948, and about 2.7 percent in 1957.. Sweden ranks eighth in typewriter exports.

Brazil is an important market for Swedish typewriters, receiving 15 percent of the total in 1957. The O.E.E.C. countries combined accounted for 34 percent, and the United States only 4 percent.

France

France and Belgium have not been important exporters of typewriters, ranking 9th and 10th in export volume. In 1949, France accounted for about 1.5 percent (6,100 units) of the world total. Her share increased to about 2 percent (23,400 units) in 1957. Algeria was the best market, accounting for 21 percent of French exports. The O.E.E.C. countries account for about 27 percent, and the United States about 15 percent.

Two U.S. firms produce typewriters in France. One firm recently completed a new and enlarged plant and intends to increase typewriter production and begin producing other office equipment.

Belgium

Belgian exports of typewriters have accounted for about 1 percent of the world total exports each year since 1954. The O.E.E.C. countries accounted for 76 percent (10,102 units) of Belgium's typewriter exports in 1957. The U. K. and France accounted for 38 percent and 20 percent, respectively, of the total in 1957. Two United States firms have assembly plants in Belgium. Production has been limited, however, and both firms have recently expanded their facilities elsewhere in Europe.

Table 5. - Typewriter Production, Consumption, and Trade
of Major Producing O.E.E.C. Countries, 1948-57^{1/}

Country and item	1949	1950	1951	1952	1953	1954	1955	1956	1957
West Germany:									
Production....	121,964	209,932	314,590	351,394	420,760	512,741	574,682	650,940	737,573
Exports.....	5,724	49,149	98,271	93,626	122,839	169,874	225,167	275,125	352,312
Imports.....	9,371	14,643	8,779	11,042	15,439	23,127	34,328	30,537	32,152
Consumption...	126,111	175,476	225,093	168,610	312,360	365,994	383,843	406,352	417,413
Italy:									
Production....	90,816	119,847	150,849	167,225	183,276	223,156	280,515	330,327	334,465
Exports.....	56,339	62,819	80,512	65,033	53,027	103,788	138,998	153,362	200,708
Imports.....	4,976	7,253	8,439	21,290	23,359	21,397	19,604	15,094	14,175
Consumption...	39,453	64,281	78,774	123,432	143,602	140,765	161,121	187,059	147,932
Netherlands:									
Production....	-	2/ 10,000	2/ 15,000	2/ 30,000	2/ 40,000	2/ 42,000	-	-	-
Exports.....	1,354	2,761	6,178	16,931	16,022	50,868	79,793	117,487	167,682
Imports.....	15,560	16,156	21,394	17,057	20,725	32,764	36,558	37,681	30,806
Consumption...	-	23,395	30,216	30,126	44,703	23,896	-	-	-
United Kingdom:									
Production....	93,052	130,792	174,734	156,947	177,636	225,336	247,049	266,949	2/287,000
Exports.....	31,631	54,525	75,710	75,418	75,051	101,164	128,925	145,587	144,355
Imports.....	55,429	35,399	42,743	17,723	14,340	33,354	57,323	65,765	79,230
Consumption...	116,050	111,666	138,817	99,352	115,925	157,526	175,445	187,127	2/218,874

Table 5. - Typewriter Production, Consumption, and Trade of Major Producing O.E.E.C. Countries, 1948-57^{1/} (Contd.)

Country and item	1949	1950	1951	1952	1953	1954	1955	1956	1957
Switzerland:									
Production	-	2/ 30,000	2/ 100,000	2/ 120,000	2/ 130,000	2/ 140,000	-	-	-
Exports	50,137	63,599	81,543	87,595	81,375	73,352	92,639	109,503	109,805
Imports	6,826	10,367	14,313	12,380	10,202	13,455	16,489	15,351	17,227
Consumption ...	-	26,763	32,765	44,785	53,327	80,103	-	-	-
France:									
Production	-	2/ 37,160	2/ 60,000	2/ 70,000	2/ 82,000	2/ 85,000	-	-	-
Exports	6,077	6,250	13,153	16,361	9,566	15,519	26,879	27,386	23,449
Imports	10,896	39,157	30,339	26,215	26,854	21,399	27,072	49,341	32,581
Consumption ...	-	70,067	77,181	79,854	99,288	90,880	-	-	-
Sweden:									
Production	-	2/ 29,700	2/ 41,000	2/ 49,000	2/ 53,800	2/ 57,500	-	-	-
Exports	22,057	26,355	26,715	30,415	21,604	29,545	30,060	35,736	32,184
Imports	3,853	12,923	16,190	14,162	12,022	16,328	20,836	16,795	20,625
Consumption ...	-	16,233	30,475	32,747	44,218	44,283	-	-	-
Belgium:									
Exports	-	-	-	-	-	6,102	6,067	9,736	13,297
Imports	16,636	24,437	27,140	23,270	20,933	22,503	23,549	24,727	25,516

1/ Available 1948 data: West Germany - exports 4,442; Italy - production 75,282, exports 48,363; United Kingdom - production 61,800, exports 25,896, imports 24,482, consumption 60,386; Switzerland - exports 46,557; Sweden - exports 14,854.

2/ Estimates by O.E.E.C. staff, Paris, France.

3/ Estimates by London Board of Trade.

Source: Official foreign government statistical publications and U.S. Typewriter Export Association documents.

Canada

Canada is a major producer and the seventh ranking exporter of typewriters. Production increased from 77,137 units in 1948 to 81,192 units in 1956. Canada's 1948 exports accounted for 4 percent (17,600 units) of the world market. She maintained a level of about 4 percent of the market until 1955 and 1956, when her exports fell off sharply to about 1 percent of the world total. In 1957, however, Canada's exports accounted for 3.6 percent of the world total, or about 43,400 units.

The United States is the best market for Canadian production, accounting for nearly 76 percent of her exports in 1957. The O.E.E.C. countries accounted for only 1.6 percent. Five U.S. firms produce or assemble typewriters in Canada, for both the Canadian and U.S. market. Because of the close ties with the Canadian industry, the U.S. industry considers Canada and the United States as a single market area -- even though Canada ranks next to the U.S. as an exporter of typewriters.

Other Countries

The 10 nations discussed above (8 O.E.E.C., Canada, and United States) account for an estimated 85-90 percent of the total world production of typewriters, and for perhaps 95 percent of the world trade in typewriters. The Iron Curtain countries of East Germany, Czechoslovakia, Poland, and Bulgaria are known to produce typewriters for export, though reliable data on the extent of their trade is lacking.

Several other countries in the Free World have recently begun to produce or assemble typewriters, but their output is chiefly for local markets. India and Spain now each produce an estimated 30,000 to 40,000 typewriters annually. Argentina, Brazil, Colombia, and Mexico are also producing or assembling typewriters on a limited scale. Foreign firms -- United States, Italian, German, or Swedish -- account for most of the production in these countries.

SUMMARY AND OUTLOOK

Changes in the world pattern of the typewriter industry have been numerous in the past decade.

Though the United States still leads in total production, five other countries surpass her in export volume. The center of international trade has shifted to Europe, and the trade pattern between the United States and Europe has been reversed and changed radically in composition. United States firms recently have established both plants and international marketing headquarters in Europe.

The most significant changes, however, may yet be forthcoming. Strong competition has developed for the world markets as the industry has become more international in character. Many of the important markets now have become producers, and some export a large share of their production.

The less-developed countries of the world are becoming more important as potential markets as their development progresses. These countries, however, are actively encouraging the development of local industry. To do so, they have instituted tariffs and exchange and trade controls which make local assembly and partial fabrication mandatory for foreign firms desiring to market their products. Thus, a dispersion of industrial plants will likely occur in an industry formerly highly concentrated in location and result in a changed world export trade pattern in typewriters.

Typewriter manufacturing, however, is more efficient and more economical if the many factors involved in the technology, such as the production of components, special heat treating, and plating services are concentrated in location and integrated into a main assembly line. Thus, continued dispersion and the necessity for partial fabrication in the less-developed countries introduces additional production problems and an element of inefficiency into the industry. These problems have thus far been largely overcome by strategically locating production facilities overseas to take advantage of the local skills and local ability to produce particular components efficiently, and shipping the components from various locations or countries to a final assembly location.

These production practices have worked well for U.S. firms that have plants in Europe and have sought low production costs for particular components. Though

production costs in Europe in 1958 are generally lower than in the United States and Canada, they are rising. Thus, one or more of the less-developed countries now producing on a limited scale may acquire, at some future date, sufficient skills and general productive capacity to produce typewriters at less cost than in Europe. The present structure of the world typewriter industry does not preclude the possibility of more countries becoming major producers and exporters.

Another anticipated trend in world typewriter trade concerns portable typewriters. The United States is by far the largest market for these. Portables for the U.S. market make up a significant proportion of European typewriter production. However, the rapid growth of the European economy and the rise in per-capita income indicates that the demand for portables for personal use in Europe should also increase in the future.

The trend has been for United States firms to produce lower-cost office models and portables in Europe, where production costs are lower, and to produce the more complicated and higher-cost electric and specialized models in the U.S., where a larger market for higher-cost typewriters enables mass production economies. With the growth of the European economy, however, the demand for more efficient office equipment has also grown. Several European firms now produce improved electric and specialized models in quantity. Thus, United States firms now producing portables and lower-cost office models in Europe may soon find it expedient to also produce electric and specialized typewriters overseas.

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